

Attorney Docket No. 5470-374

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



c. Kaplan et al.

Application No.: 10/521,381

Filed: January 18, 2005

For: *Novel Compositions and Methods for Treating HIV*

Date: June 6, 2005

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b)**

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the amendment by the U.S. Patent and Trademark Office to 37 C.F.R. § 1.98(a)(2)(ii) effective October 21, 2004. This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

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It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. §1.56 and Section 609 of the MPEP.

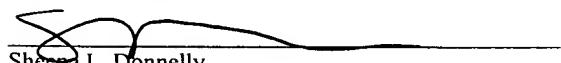
Respectfully submitted,


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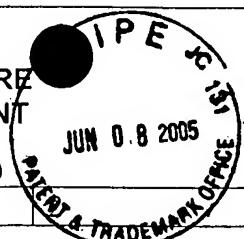
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Sheena L. Donnelly

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Comments if Known	
Application Number	1521,381
Filing Date	January 18, 2005
First Named Inventor	Kaplan
Group Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	5470-374

U.S. PATENTS AND PATENT PUBLICATIONS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
	US-				
	US-				

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation
		Office	Number	Kind Code (if known)			

OTHER NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
	1.	Bebenek et al. "The Use of Native T7 DNA Polymerase for Site-Directed Mutagenesis" <i>Nucleic Acids Research</i> 17(13): 5408 (1989)	
	2.	Bennett et al. "Functional Chimeras of the Rous Sarcoma Virus and Human Immunodeficiency Virus Gag Proteins" <i>Journal of Virology</i> 67(11): 6487-6498 (1993)	
	3.	Bowzard et al. "Importance of Basic Residues in the Nucleocapsid Sequence for Retrovirus Gag Assembly and Complementation Rescuse" <i>Journal of Virology</i> 72(11): 9034-9044 (1998)	
	4.	Choudhury et al. "Mutagenesis of the Dimer Interface Residues of Tethered and untethered HIV-1 Protease Result in Differential Activity and Suggest Multiple Mechanisms of Compensation" <i>Virology</i> 307(1): 204-212 (2003)	
	5.	Franke "Specificity and Sequence Requirements for Interactions Between Various Retroviral Gag Proteins" <i>Journal of Virology</i> 68(8): 5300-5305 (1994)	
	6.	Gamble "Structure of the Carboxyl-Terminal Dimerization Domain of the HIV-1 Capsid Protein" <i>Science</i> 278(5339): 849-853 (1997)	
	7.	Gatlin et al. "HIV-1 Protease Regulation: The Role of the Major Homology Region and Adjacent C-Terminal Capsid Sequences" <i>Journal of Biomedical Science</i> 5: 305-308 (1998)	
	8.	Jacks et al. "Characterization of Ribosomal Frameshifting in HIV-1 gag-pol Expression" <i>Nature</i> 331: 280-283 (1988)	
	9.	Kaplan et al. "Partial Inhibition of the Human Immunodeficiency Virus Type 1 Protease Results in Aberrant Virus Assembly and the Formation of Noninfectious Particles" <i>Journal of Virology</i> 67(7): 4050-4055 (1993)	
	10.	Katz et al. "The Retroviral Enzymes" <i>Annual Review in Biochemistry</i> 63: 133-173 (1994)	
	11.	Klabe "Resistance to HIV Protease Inhibitors: A Comparison of Enzyme Inhibition and Antiviral Potency" <i>Biochemistry</i> 37: 8735-8742 (1998)	
	12.	Kräusslich et al. "The Spacer Peptide Between Human Immunodeficiency Virus Capsid and Nucleocapsid Proteins is Essential for Ordered Assembly and Viral Infectivity" <i>Journal of Virology</i> 69(6): 3407-3419 (1995)	
	13.	Kunkel et al. "Efficient Site-Directed Mutagenesis Using Uracil-Containing DNA." <i>Methods Enzymol</i> 204: 125-139 (1991)	
	14.	Loeb et al. "Complete Mutagenesis of the HIV-1 Protease" <i>Nature</i> 340: 397-400 (1989)	
	15.	Mervis et al. "The gag Products of Human Immunodeficiency Virus Type 1: Alignment within the gag Open Reading Frame, Identification of Posttranslational Modifications, and Evidence for Alternative gag Precursors" <i>Journal of Virology</i> 62(11): 3993-4002 (1988)	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 2 of

Sheet

A circular stamp with the word 'OIPE' at the top. Inside the circle, the date 'JUN 08 2005' is printed. Along the bottom edge of the circle, the words 'TRADEMARK' and 'SEARCHED' are printed in a curved, overlapping manner.

Substitute form 1449A/PTO		Com if Known
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number 10/321,381 Filing Date January 18, 2005 First Named Inventor Kaplan Group Art Unit TBA Examiner Name TBA Attorney Docket Number 5470-374
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JUN 08 2005		
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16.	Molla et al. "Ordered Accumulation of Mutations in HIV-Protease Confers Resistance to Ritonavir" <i>Nature Medicine</i> 2:160-766 (1996)	
17.	Navia et al. "Three-Dimensional Structure of Aspartyl Protease from Human Immunodeficiency Virus HIV-1" <i>Nature</i> 337: 615-620 (1989)	
18.	Oroszlan et al "Retroviral Proteinases" <i>Current Topics in Microbiology and Immunology</i> 157: 153-185 (1990)	
19.	Pettit et al. "Analysis of Retroviral Protease Cleavage Sites Reveals Two Types of Cleavage Sites and the Structural Requirements of the P1 Amino Acid" <i>The Journal of Biological Chemistry</i> 266(22): 14539-14547 (1991)	
20.	Pettit et al. "Replacement of the P1 Amino Acid of Human Immunodeficiency Virus Type 1 Gag Processing Sites Can Inhibit or Enhance the Rate of Cleavage by the Viral Protease" <i>Journal of Virology</i> 76(20): 10226-10233 (2002)	
21.	Pettit et al. "The Dimer Interfaces of Protease and Extra-Protease Domains Influence the Activation of Protease and the Specificity of GagPol Cleavage" <i>Journal of Virology</i> 77(1): 366-374 (2003)	
22.	Pettit et al. "The p2 Domain of Human Immunodeficiency Virus Type 1 Gag Regulates Sequential Proteolytic Processing and is Required to Produce Fully Infectious Virions" <i>Journal of Virology</i> 68(12): 8017-8027 (1994)	
23.	Quillent et al. "Extensive Regions of <i>pol</i> are Required for Efficient Human Immunodeficiency Virus Polyprotein Processing and Particle Maturation" <i>Virology</i> 219: 29-36 (1996)	
24.	Tessmer et al. "Cleavage of Human Immunodeficiency Virus Type 1 Proteinase from the N-Terminally Adjacent p6* Protein Is Essential for Efficient Gag Polyprotein Processing and Viral Infectivity" <i>Journal of Virology</i> 72(4): 3459-3463 (1998)	
25.	Tözsér et al. "Kinetic and Modeling Studies of S ₃ -S _{3'} Subsites of HIV Proteinases" <i>Biochemistry</i> 31: 4793-4800 (1992)	
26.	Von Plobtzki et al. "Identification of a Region in the Pr55 ^{gag} -Polyprotein Essential for HIV-1 Particle Formation" <i>Virology</i> 193(2): 981-985 (1993)	
27.	Weber "Comparison of the Crystal Structures and Intersubunit Interactions of Human Immunodeficiency and Rous Sarcoma Virus Proteases" <i>The Journal of Biological Chemistry</i> 265(18): 10492-10496 (1990)	
28.	Wiegers et al "Sequential Steps in Human Immunodeficiency Virus Particle Maturation Revealed by Alterations of Individual Gag Polyprotein Cleavage Sites" <i>Journal of Virology</i> 72(4): 2846-2854 (1998)	
29.	Wlodawer et al. "Conserved Folding in Retroviral Proteases: Crystal Structure of a Synthetic HIV-1 Protease" <i>Science</i> 245(4918): 616-621 (1989)	

Examiner Signature		Date Considered	
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